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 NEO4J, INC. and NEO4J SWEDEN AB

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

NEO4J, INC., a Delaware corporation, and  
 NEO4J SWEDEN AB, a Swedish  
 corporation,

Plaintiffs,

v.

PURETHINK LLC, a Delaware limited  
 liability company, IGOV INC., a Virginia  
 corporation, and JOHN MARK SUHY, an  
 individual,

Defendants.

CASE NO. 5:18-cv-07182-EJD

**DECLARATION OF PHILIP RATHLE IN  
 SUPPORT OF PLAINTIFFS'  
 CONSOLIDATED MOTION FOR  
 SUMMARY JUDGMENT**

Date: March 25, 2021  
 Time: 9:00 a.m.  
 Dept.: Courtroom 4, 5th Floor  
 Judge: Hon. Edward J. Davila

AND RELATED COUNTERCLAIM.

NEO4J, INC., a Delaware corporation, and  
 NEO4J SWEDEN AB, a Swedish  
 corporation,

Plaintiffs,

v.

GRAPH FOUNDATION, INC., an Ohio  
 corporation, GRAPHGRID, INC., an Ohio  
 corporation, and ATOMRAIN INC., a  
 Nevada corporation,

Defendants.

CASE NO. 5:19-CV-06226-EJD

1 I, Philip Rathle, declare as follows:

2 1. I am the Vice President of Products at Neo4j, Inc. (“Neo4j USA”). I have held  
3 that position since December 2013 and prior to that worked in a similar position as Senior  
4 Director of Products at Neo4j USA, beginning May 2012. I am responsible for product  
5 management of the Neo4j product portfolio, which includes the Neo4j® graph database platform  
6 (“Neo4j® Platform”). My responsibilities include product strategy and product roadmap,  
7 including specifying what features are to be built in successive versions of the Neo4j® Platform,  
8 as well as the design and behaviors of those features. My team and I work closely with the Neo4j  
9 Product Engineering team who are responsible for building and testing each successive version of  
10 the Neo4j® Platform and who comprise of over 100 engineers primarily employed by Neo4j  
11 Sweden AB.

12 2. I submit this declaration on behalf of Plaintiffs in support of their Consolidated  
13 Motion for Summary Judgment. The facts stated in this declaration are based on my personal  
14 knowledge, except with respect to those matters stated to be on information and belief, and as to  
15 those matters, I believe them to be true. If called upon to testify as a witness in this matter, I  
16 could and would do so competently.

17 3. Neo4j USA is the parent corporation of Neo4j Sweden AB (“Neo4j Sweden”),  
18 which in turn is as a wholly owned subsidiary of Neo4j USA. As Vice President of Products for  
19 Neo4j USA, I work with Neo4j Sweden and other subsidiaries world-wide as referenced above.  
20 This includes working with Neo4j Sweden’s continuing development of the source code  
21 underlying the software for the Neo4j® Platform and various quality assurance and testing on  
22 software package builds compiled from this source code. I also work closely with Neo4j  
23 Marketing, Developer Relations, Field Engineering, Support, Customer Success, and Professional  
24 Services, to ensure they understand the Neo4j® Platform and its capabilities, and can  
25 communicate about it and use it as appropriate to their role. I also spend a great deal of time  
26 meeting with customers about their use of the Neo4j® Platform and their needs.

27 4. As Vice President of Products for Neo4j USA, I have been involved in strategic  
28 decisions concerning the world-wide licensing strategy for the Neo4j® Platform. Neo4j Sweden

1 is the owner of all copyrights related to the Neo4j® Platform, including the source code, and has  
 2 licensed those copyrights to Neo4j USA in connection with the making, use, creation of  
 3 derivative works, sale, offer to sell, importation, performance, display, reproduction and  
 4 distribution of the copyrighted material, and the sublicensing of such rights in the United States.  
 5 This includes Neo4j USA being solely responsible for the commercial licensing of Neo4j®  
 6 Platform products and managing the Neo4j Solution Partner program in the United States.

7 5. From 2010 until present, Neo4j Sweden and Neo4j USA’s business model  
 8 followed the “multi-licensing” model in the software industry. In this scenario, one option is a  
 9 proprietary software license, which allows the possibility of creating proprietary applications  
 10 derived from it, while the other license is a “copyleft” open-source license, which requires public  
 11 release under the same open-source license of any derived work. Under this model, Plaintiffs  
 12 offered two products, Neo4j® Community Edition (“Neo4j® CE”) along with a richer and more  
 13 feature-robust Enterprise Edition (“Neo4j® EE”) designed for commercial deployment, both  
 14 products engineered by Neo4j Sweden.

15 6. Neo4j® CE is offered by Plaintiffs for royalty-free use, subject to the terms of the  
 16 GNU General Public License version 3 (“GPL”) license and provides a limited feature set. For  
 17 example, Neo4j® CE limits the ability to operate on only one machine at a time (i.e. no  
 18 clustering), work with only one database at a time (i.e. no “multi-database” capability). It also  
 19 has limited operational features, security features, and is offered without support contracts or  
 20 warranties from Neo4j USA and Neo4j Sweden (collectively, “Plaintiffs”).

21 7. Neo4j® offers its EE under commercial licensing terms, including technical  
 22 support, and is the primary source of revenue for Plaintiffs. Neo4j® EE provides customers with  
 23 added advanced scalability, availability, security, and operational features. Users requiring those  
 24 additional features for more advanced commercial operation, including unlimited number of user  
 25 databases, together with support, license use of the Neo4j® Platform through Neo4j® EE under  
 26 commercial terms. Commercial users benefit from a turn-key solution with the assistance of  
 27 authorized Neo4j solution partners, typically avoiding drawn-out development processes. Neo4j®  
 28 EE is a full superset of Neo4j® CE, containing significant additional functionality intended for

1 commercial use. In the United States, a commercial license to Neo4j® EE entitled the purchaser  
 2 to use it in a custom setting composed of proprietary modules with industry standard terms,  
 3 receive support or professional services from Neo4j USA, and the right to receive periodic  
 4 software updates, which included feature updates, bug and security fixes and assistance. Both  
 5 Neo4j® EE and Neo4j® CE undergo extensive testing and review as described below.

6 8. Plaintiffs originally offered Neo4j® EE under a paid-for commercial license and  
 7 also made the source code available under the GNU Affero General Public License, version 3  
 8 (“AGPL”), to allow testing and trial use, and non-commercial use, following well-accepted dual-  
 9 licensing model that has been, or is being, used by software companies, such as Oracle (with  
 10 MySQL), IBM (with Linux), and MongoDB.

11 9. Purchasing a commercial license supported the continued development and  
 12 improvement of Neo4j® EE and the Neo4j® Platform as a whole, including the development of  
 13 source code for proprietary modules made for enterprise uses and overall improvements to the  
 14 source code underlying Neo4j® CE. Importantly, the commercial license for Neo4j® EE also  
 15 relieved customers of the “copyleft” obligations included in the AGPLv3, which obligated end  
 16 users to open source any applications that access the database either locally or over a network.  
 17 Attached hereto as **Exhibit 1** is a true and correct copy of an exemplar of the AGPL as previously  
 18 used by Neo4j Sweden for Neo4j® EE version 3.3 (and earlier versions), which is still available  
 19 on Plaintiffs’ GitHub repository.<sup>1</sup>

20 10. Neo4j® EE version 3.3 was the first version of Neo4j® EE to include a small  
 21 number of closed-source features for increased security as needed by commercial users of the  
 22 Neo4j® Platform, namely Kerberos and intra-cluster encryption. The source code for those two  
 23 features were not included in Neo4j’s public GitHub source code repository, but were instead  
 24 built and managed inside a private repository. All of the tests to Neo4j® EE version 3.3

25  
 26 <sup>1</sup> GitHub provides hosting for software development and version control. It offers software  
 27 distributed version control, source code management, as well as access control and collaboration  
 28 features such as bug tracking, feature requests, task management, and continuous integration.  
 GitHub offers its basic services free of charge. Its more advanced professional and enterprise  
 services are available on commercial terms.

1 conducted by Plaintiff were done so specifically accounting for these features and the interplay  
2 between that functionality and the other classes of code within the software.

3 11. In May 2018, Plaintiffs released Neo4j® EE version 3.4, which they continued to  
4 offer under a dual license. Attached hereto as **Exhibit 2** is a true and correct copy of a May 17,  
5 2018 announcement I published on Neo4j USA's website regarding the release of Neo4j® CE  
6 and Neo4j® EE version 3.4. However, Neo4j Sweden replaced the AGPLv3 with a stricter  
7 license, which included the terms of the AGPLv3 with additional restrictions and further  
8 information about the owner and author of the copyrights underlying the source code (the "Neo4j  
9 Sweden Software License"), which in relevant part stated:

10 NOTICE

11 This package contains software licensed under different licenses, please refer  
12 to the NOTICE.txt file for further information and LICENSES.txt for full  
13 license texts. Neo4j Enterprise object code can be licensed independently from  
14 the source under separate commercial terms. Email inquiries can be directed to:  
15 licensing@neo4j.com. More information is also available  
16 at: <https://neo4j.com/licensing/> The software ("Software") is developed and  
17 owned by Neo4j Sweden AB (referred to in this notice as "Neo4j") and is  
18 subject to the terms of the GNU AFFERO GENERAL PUBLIC LICENSE  
19 Version 3, with the Commons Clause as follows:

20 \* \* \*

21 "Commons Clause" License Condition

22 The Software is provided to you by the Licensor under the License, as defined  
23 below, subject to the following condition. Without limiting other conditions in  
24 the License, the grant of rights under the License will not include, and the  
25 License does not grant to you, the right to Sell the Software. For purposes of  
26 the foregoing, "Sell" means practicing any or all of the rights granted to you  
27 under the License to provide to third parties, for a fee or other consideration, a  
28 product or service that consists, entirely or substantially, of the Software or the  
functionality of the Software. Any license notice or attribution required by the  
License must also include this Commons Cause License Condition notice.

Attached hereto as **Exhibit 3** is a true and correct copy of an exemplar of the Neo4j Sweden  
Software License used with Neo4j® EE version 3.4, which is still available on Plaintiffs' GitHub  
repository.

12. This marked an important transition for newer versions of the source code for  
Neo4j® EE: from being "open source", to being "source available." More specifically: while  
allowing code to be publicly viewable and used within a certain limited scope of usage, the Neo4j  
Sweden Software License imposes commercial restrictions that included third-party resale and

1 services activity. This new license, applied to Neo4j® EE version 3.4 and several pre-release  
 2 versions of Neo4j® EE version 3.5, and are sufficiently restrictive so as to no longer qualify as  
 3 “open source” under industry-accepted definitions of open source. Plaintiffs made the decision to  
 4 modify the license terms used to distribute Neo4j® EE to prevent third parties from monetizing its  
 5 software while not contributing back to the software or companies who are producers of the  
 6 software. Plaintiffs also wanted to be able to control their reputation and brand by certifying and  
 7 approving services partners working with the flagship commercial version of its product.

8 13. In November 2018, Plaintiffs officially released Neo4j® EE version 3.5 solely under  
 9 a proprietary and commercial license, while they continued to offer the source code for Neo4j® CE  
 10 under the GPL open source license. This meant that Plaintiffs were no longer publishing source  
 11 code for new versions of Neo4j® EE to their public GitHub repository. This was done to simplify  
 12 the Neo4j® Platform’s licensing model, as well as to more clearly communicate the commercial  
 13 intent of the Neo4j® EE product, and prevent third parties from engaging parasitic behavior and  
 14 diverting funds from the Plaintiff to themselves in closed, proprietary commercial projects.  
 15 Attached hereto as **Exhibit 4** is a true and correct copy of November 15, 2018 announcement  
 16 regarding the release of Neo4j® CE and Neo4j® EE version 3.5 that I published on Neo4j USA’s  
 17 website.

18 14. Prior to its official release, Plaintiffs published several beta versions of the source  
 19 code for Neo4j® EE v3.5 via their GitHub repository subject to the Neo4j Sweden Software  
 20 License. Plaintiffs did so in order to obtain user input and to make it easier to identify potential  
 21 bugs that could be fixed prior to its official release. Neo4j® EE version 3.5.0-RC1 was the last  
 22 pre-release beta version made available via GitHub. Thereafter, Plaintiffs only made the source  
 23 code for Neo4j® CE available under the GPL via Github and only distributed Neo4j® EE as  
 24 executable object code under a commercial license.

25 15. Both Neo4j® EE and Neo4j® CE have been subject to trademark policies and  
 26 guidelines published on Plaintiffs’ website. These policies made clear that to the extent any  
 27 authorized modifications are made to Neo4j® Software, such modified software should indicate  
 28 so and no longer bear the Neo4j® Mark. Neo4j USA did this to ensure that consumers knew

1 when they were receiving genuine Neo4j® Software that was quality assured by Plaintiffs rather  
 2 than third-party modified open source versions thereof.

3 16. Attached hereto as **Exhibit 5** is a true and correct copy of a July 10, 2017 capture  
 4 of Neo4j USA's Trademark Policy located at <https://neo4j.com/trademark-policy/>, which was  
 5 downloaded from the Wayback Machine website, a digital archive of the World Wide Web  
 6 (<https://web.archive.org>). This version of Neo4j USA's Trademark Guidelines was updated on  
 7 October 13, 2015, and to my knowledge publicly available on Neo4j USA's website between  
 8 October 15, 2015 and April 2, 2019.

9 17. Attached hereto as **Exhibit 6** is a true and correct copy of a September 26, 2019  
 10 printout of Neo4j USA's Trademark Guidelines. This version of Neo4j USA's Trademark  
 11 Guidelines has been publicly available on Neo4j USA's website since April 3, 2019.

12 18. Attached hereto as **Exhibit 7** is a true and correct copy of an August 8, 2020  
 13 capture of Neo4j USA's Trademark Guidelines located at <https://neo4j.com/trademark-policy/>,  
 14 which was downloaded from the Wayback Machine website, a digital archive of the World Wide  
 15 Web (<https://web.archive.org>). Again, this version of Neo4j USA's Trademark Guidelines has  
 16 been publicly available on Neo4j USA's website since April 3, 2019.

17 19. As Vice President of Products, I am also involved in and work with Neo4j Sweden  
 18 AB's continuing development of the source code underlying the software for the Neo4j®  
 19 Platform and various quality assurance and testing on software package builds compiled from this  
 20 source code. Neo4j Sweden AB ("Neo4j Sweden") relies on more than 100 engineers, dozens of  
 21 engineering-years of build and test infrastructure, and millions of dollars annually in  
 22 infrastructure costs alone in continuing to improve Neo4j® EE.

23 20. Included in our tests is approximately 150,000 unit and integration tests that run  
 24 automatically on every code change to each new version of both Neo4j® CE and Neo4j® EE. We  
 25 also have an extensive suite of stress and robustness tests, which subject the database product  
 26 artifacts that we build to complex randomized scenarios that include deliberately-induced  
 27 machine outages, to ensure that distributed computing ("clustering") features, which are unique  
 28 to Neo4j® EE, adequately protect customers and their data from the kinds of network, server, and



1 software outages that occur in real-world customer environments, providing resilience in the face  
2 of technical adversity.

3 21. Another important kind of test that we have is end-to-end soak testing, which is  
4 based on an infrastructure was expensive and time consuming to build. Plaintiffs have had a team  
5 of engineers that are dedicated to building and maintaining this testing framework since at least  
6 2014. This test is only performed on Neo4j® EE releases and not independently performed on  
7 Neo4j® CE release. This layer, like the others, leverages a complex proprietary automation suite  
8 that simulates how end users would automate and run Neo4j® EE. It access a Neo4j® EE cluster  
9 through Neo4j's programmatic software drivers, running realistic load through the system for  
10 days at a time, to ensure stable operation over extended periods, simulating customer usage.  
11 Neo4j also has a complex benchmarking suite that is run with every candidate release of the  
12 Neo4j® EE software, designed to ensure that there are no performance regressions in between  
13 releases of software. This includes micro benchmarks, which are highly localized and fine  
14 grained; macro benchmarks, which use larger data sets, some of which are obfuscated and  
15 anonymized data sets provided by customers for this purpose; and full workloads, which test  
16 databases of different size with mixed workloads with high levels of concurrency.

17 22. In addition to all of the automated testing outlined above, Neo4j USA and Neo4j  
18 Sweden's customer-facing technical experts, including Customer Support, Field Engineering  
19 (pre-sales), Professional Services (consulting), Product Management (my own team that has  
20 included employees of both Neo4j USA and Neo4j Sweden), carry out manual testing of releases  
21 as part of our certification process, before they are deemed ready to be shipped to customers.

22 23. In or about September 2017, I learned that John Mark Suhy had formed a new  
23 company called iGov Inc., and that a group within Internal Revenue Service intended to award  
24 PureThink a sole-source contract for their so-called "iGov Graph Database" software, which  
25 appeared to be compiled using the source code from a version of Neo4j® EE licensed under the  
26 AGPL. On September 19, 2017, Neo4j USA filed a protest objecting to the sole source  
27 justification of the intended award.

28 ///



24. In or about October 2017, I learned from iGov’s website, [www.igovsol.com](http://www.igovsol.com), that John Mark Suhy was recompiling binaries allegedly from source code underlying Neo4j® EE v3.3, which he called “Neo4j Enterprise” and was advertised as being identical to Plaintiffs’ official Neo4j® EE v3.3 binaries. I downloaded this version distributed by iGov from <https://igovsol.com/downloads.htm> and found that this software as compiled by Mr. Suhy was not of the same quality as official binary compiled by Neo4j Sweden, and did not include several closed-sourced features and corresponding source code.

25. In particular, I learned the following from the inspection of Mr. Suhy’s recompiled version of Neo4j® EE v3.3:

- Mr. Suhy was using modified versions of older build scripts to assemble iGov’s Government Package for Neo4j/Neo4j Enterprise.
- Mr. Suhy did not include key security feature such as kerberos and intra-cluster encryption, which were only available in the official Neo4j® EE v3.3 release.
- Neo4j® EE includes many components (“jar” files). The version made available by Mr. Suhy included many but not all of the components, calling into question whether the software would operate to the same level of capability and quality as Neo4j Sweden’s official release of the software. Specifically, two commercial-only libraries, neo4j-server-commercial-3.3.0.jar and neo4j-causal-clustering-commercial-3.3.0.jar did not exist in Mr. Suhy’s version of “Neo4j Enterprise.”

26. By recompiling Neo4j® EE v3.3 in the foregoing manner, Mr. Suhy introduced modifications that Plaintiffs would not consider to be of the same quality as if were compiled by Neo4j Sweden. Mr. Suhy’s intermixing of scripts from older versions of Neo4j® EE increased the likelihood of stability issues for end-user customers and the co-mingling of divergent code increases the risk of environment failure and/or loss of database and/or data availability.

27. After Plaintiffs released Neo4j® EE version 3.4, I learned from iGov’s website that it was promoting what it called open source “Neo4j Enterprise” version 3.4. I downloaded a copy of this software and found that similar to the software iGov released supposedly based on Neo4j® EE version 3.3, this “version 3.4” had been built with older versions of build scripts

1 modified by Mr. Suhy, and that the Neo4j Sweden Software License had also been replaced with  
 2 a generic copy of the APGL in the LICENSE.txt files accompanying iGov's versions of what it  
 3 called version 3.4 of its own offering it called "Neo4j Enterprise" and ONgDB.

4 28. Since Plaintiffs were no longer offering the binaries for Neo4j® EE version 3.4  
 5 under a non-commercial license, iGov's version of what it called "Neo4j Enterprise v3.4" it  
 6 would be highly unlikely that it would be of the same quality as if were compiled by Neo4j  
 7 Sweden AB, which is subject to the extensive proprietary testing described above beyond what is  
 8 publicly available in Neo4j® CE.

9 29. On or about September 20, 2019, I inspected a copy of ONgDB v3.5.9 that GFI  
 10 claimed was licensed under the AGPL and purported to mirror Neo4j® EE version 3.5.9, which I  
 11 obtained from Defendant Graph Foundation's GitHub repository. Plaintiffs never offered this  
 12 version of the software as either open source under the AGPL, nor as source available. ONgDB  
 13 version 3.5.9 contained 247 Java classes that were released for the first time under the Neo4j  
 14 Sweden Software License either in (a) Neo4j® EE version 3.4 and were incorporated into  
 15 Neo4j® EE version 3.5; or (b) Neo4j® EE version 3.5.0-RC1, and were therefore never  
 16 previously licensed under the AGPLv3. Additionally, the full underlying source code for the  
 17 enterprise-only components of Neo4j® EE version 3.5.9 was never made available or released  
 18 under the Neo4j Sweden Software License, or any open source license. Specifically, Neo4j® EE  
 19 version 3.5.9 includes ten versions worth of discrete advances (fixes & improvements critical to  
 20 the reliable function of the software) not present in the last version of restricted source available  
 21 software that I understand that ONgDB used as the basis for its software.

22 30. Also as part of my inspection, I also reviewed a commit  
 23 ([https://github.com/graphfoundation/ongdb/commit/c0b23b21e051fe12bd01a50d46ca3a7ad9e883](https://github.com/graphfoundation/ongdb/commit/c0b23b21e051fe12bd01a50d46ca3a7ad9e88374)  
 24 [74](#)) authored by John Mark Suhy in the ONgDB Github repository where he replaced at least 28  
 25 LICENSE.txt files that contained the Neo4j® Sweden Software License covering the  
 26 aforementioned source code files and replaced it with the AGPL.

27 31. As described above, Neo4j Sweden employs significant propriety testing and  
 28 quality assurances beyond what is publicly available in Neo4j® CE to create and build Neo4j®

1 EE version 3.5. The substantially complex nature of those scripts and tests, combined with the  
 2 significant multi-year investment in said infrastructure, the large team involved in operating these  
 3 tests and knowledge and training required to maintain and evolve them, the high cost of running  
 4 these tests (over \$1M/year in infrastructure costs alone), the complex nature of the Neo4j® EE  
 5 software itself, and the lack of visibility into the code changes being made in all versions  
 6 subsequent to Neo4j® EE version 3.5-RC, make it improbable that any third party, including  
 7 John Mark Suhy (iGov & PureThink), Brad Nussbaum and Ben Nussbaum of the Graph  
 8 Foundation (and AtomRain and GraphGrid), would be able to replicate the same level of  
 9 reliability, quality, or features of subsequent releases of Neo4j® EE 3.5.x by Plaintiffs. As a  
 10 result, there would be an increased potential for instability and compatibility issues in ONgDB  
 11 software that is compiled in this manner, and that fails to include incremental improvements to  
 12 the proprietary software.

13 32. Given the number of engineers that work on developing Neo4j® EE, the amount  
 14 of man hours they put in and the rigors of Neo4j Sweden's proprietary development and testing  
 15 protocols, and the long period of onboarding required for each engineer to become familiar with  
 16 the code and quality processes, it would be virtually impossible for Graph Foundation replicate  
 17 this. Consequently, neither Neo4j USA nor Neo4j Sweden would consider ONgDB v3.5.9 to be  
 18 the exact equivalent both in function and quality as the same version of official Neo4j® EE  
 19 v3.5.9, and this would be true for any other version of ONgDB 3.5.x that Graph Foundation  
 20 claims to be the equivalent version of Neo4j EE v3.5.x.

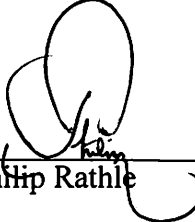
21 33. When Neo4j Sweden closed off the enterprise source code after Neo4j® EE  
 22 version 3.5.0-RC1, any changes or additions it made to that code that were not mirrored in  
 23 Neo4j® CE would not be available to developers and end users of Neo4j® EE v3.5.x. This includes  
 24 Neo4j 3.5.0, which was the first version certified for General Availability by Plaintiff, and  
 25 collectively includes critical fixes and other ongoing improvements in closed-off enterprise code,  
 26 a substantial number of which are in the clustering layer of the software, which is now closed  
 27 source. Thus, Graph Foundation would not have received such fixes and improvements, nor have  
 28 been aware of the precise nature of all of the fixes. As of the date of this declaration, the latest

1 version of Neo4j® EE is 4.2.1; and the latest version of the Neo4j® EE 3.5 code line is Neo4j  
 2 3.5.25. *See* <https://neo4j.com/release-notes/>. With over twenty proprietary patch releases  
 3 differentiating the underlying code line of Neo4j® EE 3.5.25, any versions of ONgDB relying on  
 4 older code would be meaningfully different from version 3.5.0-RC1, the pre-general availability  
 5 release candidate upon which ONgDB is based.

6 34. Examples include multiple critical patches introduced by Neo4j Sweden that were  
 7 only included in the closed enterprise code for Neo4j® EE 3.5.x and were never publicly release  
 8 under the Neo4j Sweden Software License or the AGPL, or otherwise made publicly accessible or  
 9 available via Neo4® CE. The specific fixes to the closed Neo4j® EE source code consisted of  
 10 security and functionality fixes crucial to proper operation of clustering and other commercial-  
 11 only features. These patches were necessary to increase the stability and functionality of Neo4j®  
 12 EE, and in particular to avoid the risk that customers using the software might face risks and  
 13 instabilities with their data and operation of the software, including risk of unplanned downtime,  
 14 data corruption, returning incorrect results for certain queries, and risks the reliable operation of  
 15 backups. The absence of these Neo4j-developed and tested patches in ONgDB software leaves  
 16 users vulnerable to these and other problems, for which Plaintiff is uniquely positioned and has  
 17 uniquely invested in addressing.

18 I declare under penalty of perjury under the laws of the United States of America that the  
 19 foregoing is true and correct, and that this declaration was executed on this 10th day of December  
 20 2020, at San Mateo, California

21  
 22  
 23  
 24  
 25  
 26  
 27  
 28



Philip Rathle

**EXHIBIT 1**

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## Preamble

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**EXHIBIT 2**





(Neo4j Blog)←[:BACK]

# Neo4j Graph Database 3.4 GA Release: Everything You Need to Know



Philip Rathle, VP of Products

May 17, 2018 · 8 mins read

*Author's note: What a hectic week in the world of Neo4j! In addition to finalizing the delivery of Neo4j 3.4, we simultaneously built the [GQL Manifesto](#), a call to support a common, unified Graph Query Language. Thank you to the graph community for your strong vote of support! [If you have not already voted, please do so.](#)*

The Neo4j graph database has always been the technology closest to the core of our mission: *to help the world make sense of data.*

With today's general availability release of [Neo4j Graph Database version 3.4](#), we believe that mission is advanced further than ever before.

The [native graph database](#) is the foundation around which the rest of the Neo4j Graph Platform is built, and we're proud to be releasing this version that will delight both longstanding community developers and enterprise DBAs alike.



Graph Database 3.4

3.4 Features By Edition	Community	Enterprise
Data Types		
Date/Time data type	<input type="checkbox"/>	<input type="checkbox"/>
3D Geospatial data types	<input type="checkbox"/>	<input type="checkbox"/>
Performance Improvements		
Native String Indexes – up to 5x faster writes	<input type="checkbox"/>	<input type="checkbox"/>
Fast Backups	<input type="checkbox"/>	2x Faster
Enterprise Cypher Runtime up to 70% faster	–	<input type="checkbox"/>
100B+ Bulk Importer	<input type="checkbox"/>	Resumable
Enterprise Scaling & Administration		
Multi-Clustering (partition of clusters)	–	<input type="checkbox"/>
Automatic Cache Warming	–	<input type="checkbox"/>
Rolling Upgrades	–	<input type="checkbox"/>
Resumable Copy/restore cluster member	–	<input type="checkbox"/>

New diagnostic metrics and support tools

—

□

Property Blacklisting

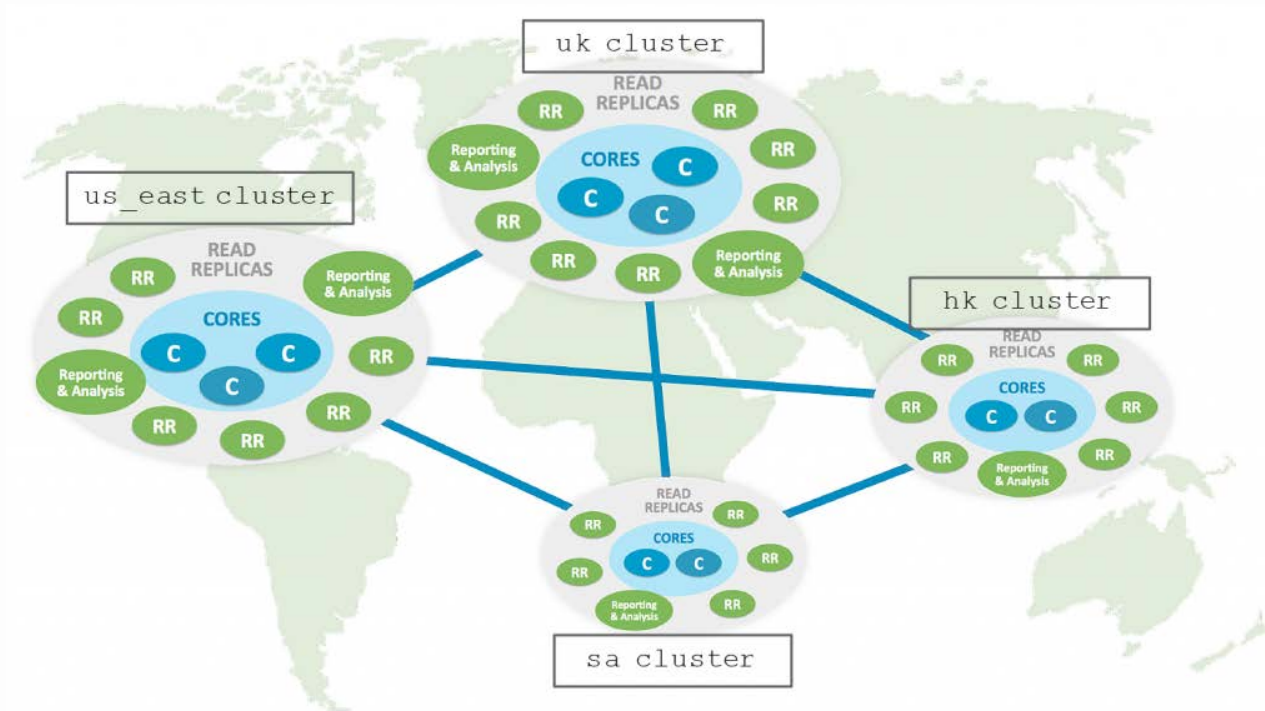
—

□

Here is a closer look at the release-defining features of Neo4j Database 3.4:

## Multi-Clustering

Multi-Clustering is the flagship feature of Neo4j Database 3.4, advancing the [Graph Platform](#) in scale, expanded uses and performance.



With Multi-Clustering, you can create and manage multiple domain-specific database clusters, effectively

partitioning the graph into independent parts. We view this as a step in our march toward fully-sharded horizontal scaling of graph data.

Multi-Clustering can be used to logically partition graphs; create highly-available, large-scale multi-tenant SaaS systems; or oversee multiple graph implementations across the enterprise. For example, Multi-Clustering is perfect for building GDPR-compliant data lineage systems by country, or segmenting a [graph database](#) according to product line or division.

## Directory Service

Multi-Clustering comes with a new directory service that manages a routing table of locations for each named database cluster. The directory service lives within lower levels of Bolt drivers at the same level as cluster load balancing and routing logic, all of which saves developers innumerable headaches.

## Multi-Clustering Scalability Use Cases & Strategies

Here are just a few scalability use cases of Multi-Clustering we initially imagined (we're sure you'll surprise us with even more):

### 1. Physical Graph Partitioning

For the horizontal scaling of databases with logically distinct [graphs](#), Multi-Clustering can be used to adopt a strategy of physical graph partitioning.

Physical graph partitioning might include naming and managing graphs according to geography (e.g., country), customer ID, products, use cases, versions, or data center as individual clustered instances. Or, you could use this approach for the creation and storage of multiple analytic graphs derived from graph-based analysis.

Physical graph partitioning is a cloud-friendly model, especially considering server-to-server encryption, multi-

data center or zone support in conjunction with the above-mentioned strategies.

## 2. Cluster-Based Multi-Tenancy

Using Multi-Clustering for a cluster-based multi-tenant strategy allows you to define baseline schemas and data templates independent of a given tenant. You can also name graph data according to tenant ID and route it accordingly.

This strategy allows SaaS providers to deploy tenants as triplets of cloud instances that both separates individual customer data and provides high availability and customer-centric security – all without disturbing the top-level behavior and operation of the application or service.

## 3. Multi-Graph Operations within the Enterprise

Finally, Multi-Clustering can be used to combine oversight of use-specific graphs within an enterprise organization, such as metadata, GDPR compliance services, identity management, network topology management and Customer 360 experience data.

# New Data Types

Neo4j Database introduces two brand-new data types: **date/time** data and **three-dimensional geospatial** data. These new data types enable optimized [Cypher](#) queries for searches across time or space.

## Temporal Data in Neo4j

The introduction of date/time data expands graph-based thinking into other types of temporal (time-situated) logic and queries that matches modern research happening at leading universities across the globe. Temporal data is also important for Internet of Things (IoT) use cases, versioning and other changes-over-time implementations.

With the new date/time data types, you can more easily tap into a variety of use cases, such as:

- Time trees
- Change logs
- Temporal incentives (“Offer this coupon until this date.”)
- Complements to spatial queries (“Optimize route based on commute hour.”)

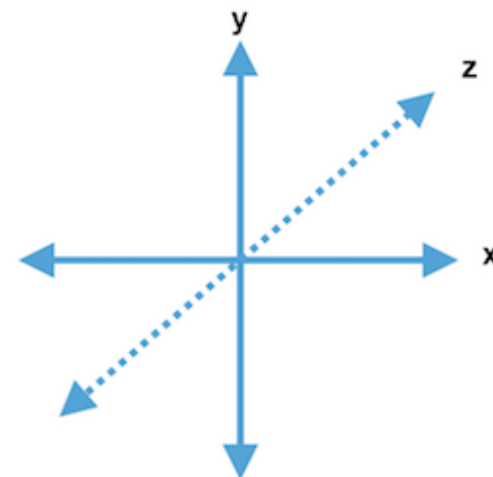
The new date/time data includes a variety of formats and conforms to a familiar SQL-like model.

## 3D Spatial Data in Neo4j

In addition to traditional latitude and longitude, the new geospatial data types in Neo4j also include Cartesian coordinates (x, y, z), radial distances, altitude, depth and slope.

**Query Example: “Find all coffee shops within 100m”**

```
WITH point({latitude: 55.612149, longitude: 12.995090}) AS poi
MATCH (l:Location)-[:AT]-(b:Business)-[:OF]->(c:Category)
WHERE c.name = "coffee"
AND distance(l.location, poi) < 100
RETURN distance(l.location, poi) as distance, b.name as coffee_shop
ORDER BY distance DESC
```

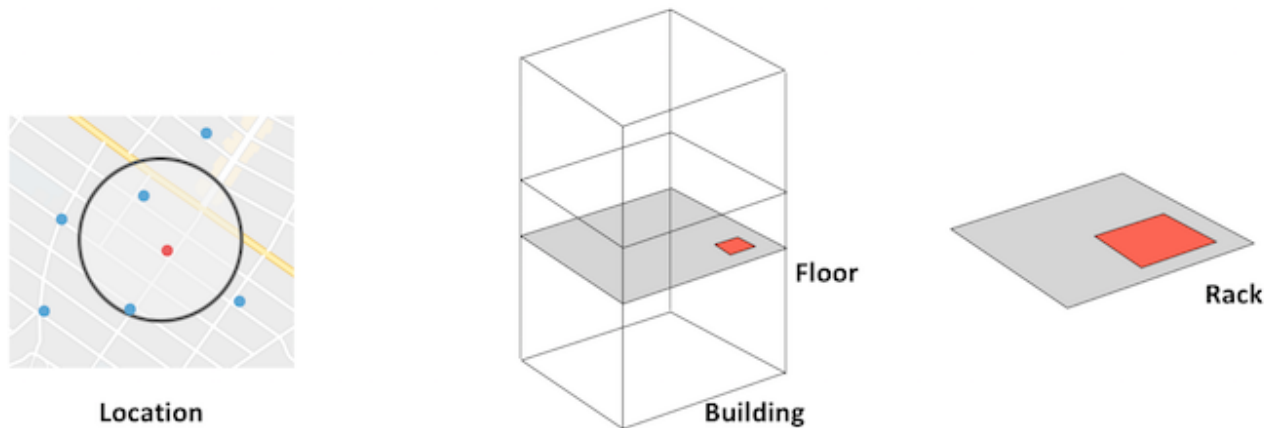


**Neo4j Database 3.4 now supports three-dimensional geospatial search as a data type and in Cypher queries.**

These new data types greatly expand the types of searches and use cases for graph data, including location-based searches (“Find me a coffee shop within 100 meters”) and 3D routing requests (“Route the delivery to the 3rd floor”).

Another example: Using these new data formats, you could build a real-time bike-messenger delivery system that could not only locate addresses, but also specify time of delivery and elevation changes for the rider.

## “Recommend a shirt available in a store close by in the men’s department”



Another 3D geospatial search example: Recommend a shirt available in a multi-floor store close by in the men’s department. In Neo4j 3.4, Cypher queries now support the data types necessary to complete such searches and recommendations.

## Performance Improvements

Neo4j 3.4 is faster in terms of both reads and writes, and these overall performance improvements are



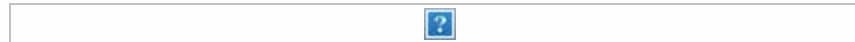
proportionally reflected in both Community and Enterprise Editions (with some differences).

The 3.4 release removes multiple layers of APIs between the kernel, interpreters and compilers, producing impressive performance improvements that other graph-layered products will find challenging to reproduce.

## Blazing-Fast Writes

- **Writes are now up to 5x faster** for nodes with indexed string properties, thanks to native string indexes and lessening dependence on third-party libraries.
- A **new kernel API** streamlines internal instructions.
- Bulk imports can handle over a 100 billion nodes and relationships.
- **Transaction states consume less memory** thanks to various efficiency improvements (including native indexing) working together.

### Writes with Native String Indexes



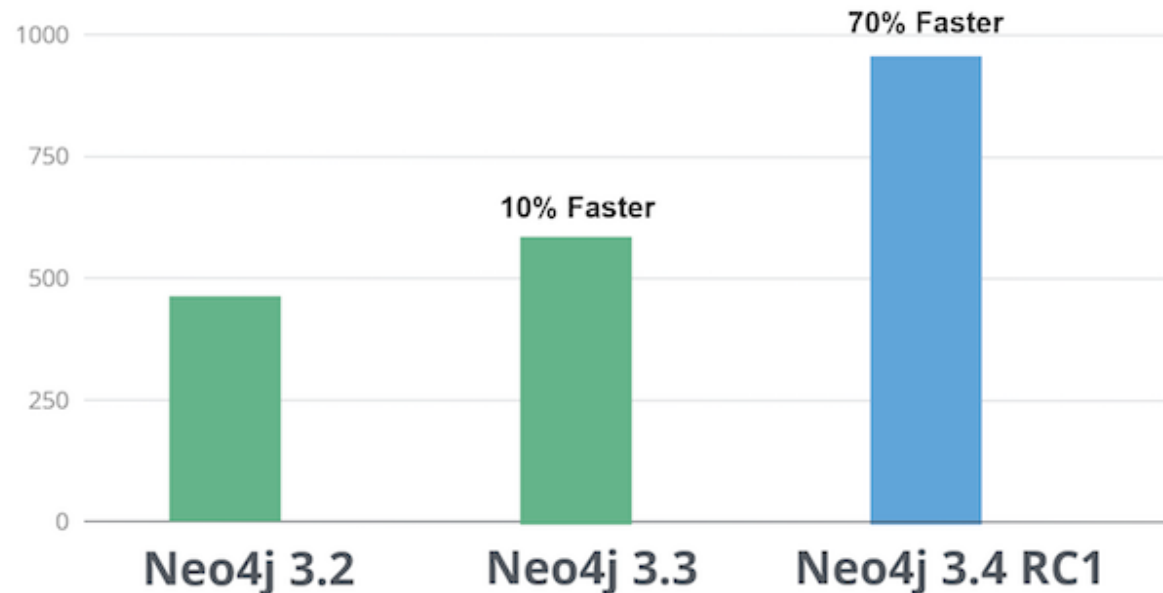
Writes are now up to 5x faster for nodes with indexed string properties, thanks to native string indexes. This reduces Neo4j's dependency on the popular external indexing library Lucene, and gives Neo4j finer-grained control over index response times.

## Speedy Reads

- Internal testing shows that **Cypher runtime is 20% faster** than for Neo4j 3.3 Community Edition and **Cypher runtime is 50-70% faster** than Neo4j 3.3 Enterprise Edition.

# Reads – Neo4j Enterprise Cypher Runtime

Mixed Workload Read Benchmark



Internal testing shows that Cypher runtime is 50-70% faster in Neo4j 3.4 Enterprise Edition than in Neo4j 3.3 Enterprise Edition.

## New Administrator Features

Database administrators, DevOps and other support staff have had an important voice in strengthening Neo4j both in the past and in the 3.4 release. Some of the key highlights include:

- **Hot backups are now twice as fast** as in previous releases.
- After restart or restore, **active cache warming** now automatically warms the page cache to its previous operational state, getting servers back online in record time. This active warm-up exercise also cascades to Read Replicas within that Causal Cluster. The effect is that applications enjoy the peak operational responsiveness – immediately.
- A **new diagnostic utility** (dump tool) improves the speed and accuracy of collaboration support cases

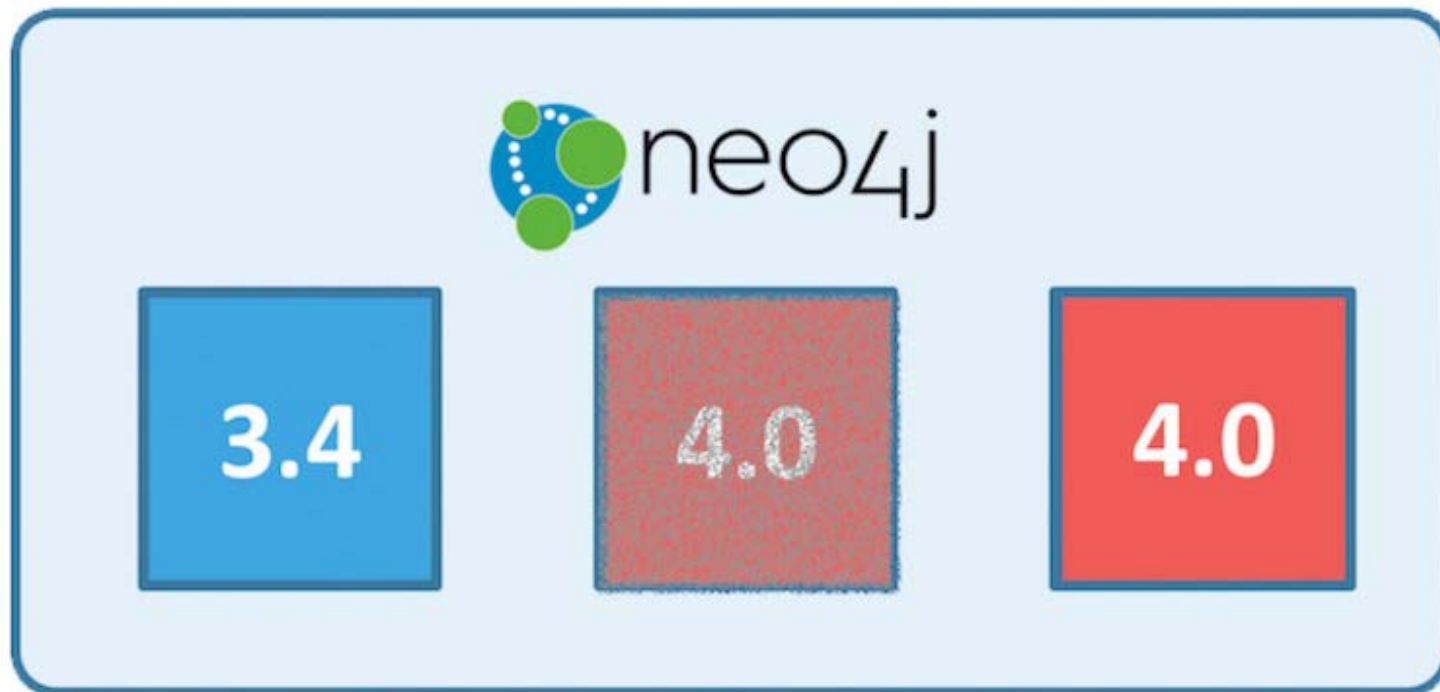
between customers and Neo4j Support.

## Cluster Member Management

- **Data store copy and catch-up** features to enable a new empty instance to join a cluster and become operational in no time. This feature adds full transaction history as well as bulk-load historic data and transaction leftovers.
- **Catch-up functions** can be stopped and resumed, and also include ongoing raft log updates to complete making a new instance fully armed and operational.

## Rolling Upgrades

- Rolling upgrades allow for **updating older instances while keeping other members stable** and without requiring a restart of the environment.
- All **new patch, minor and major versions** will support rolling upgrades starting from Neo4j 3.4.
- Rolling upgrades will operate with **both read-only and read/write instances**.



Neo4j 3.4 now supports rolling upgrades so you can update older instances while keeping other members stable and without requiring a restart of the environment.

## Database Security Advancements

As with past releases, the Neo4j Database 3.4 release continues to robustly uphold modern database security principles, often not available in competing graph stores or other NoSQL databases.

Our current database security features include:

- User- and role-based security within the database
- LDAP and AD directory integration
- Kerberos authentication (ticket-based)

- HTTPS access to all user-facing interfaces
- TLS encrypted traffic among cluster routing, cluster members, including through Bolt application drivers and across data centers
- Encrypted data at rest via file-system encryption

With Neo4j 3.4, administrators can now implement **property blacklisting by name or role**, securing property visibility. This feature is similar to SQL-centric column level security without impacting performance.



With Neo4j 3.4, administrators can now implement property security by name, blacklisting properties for users.

## Conclusion

As the core of the Neo4j Graph Platform, this 3.4 release of the Neo4j Graph Database indicates an upgrade

for the entire platform that relies on it. We're confident that the upgrades in Neo4j 3.4 will deliver stunning spillover results into all of the new products and features of the Graph Platform as they roll out later this year.



**Neo4j Database 3.4 is just one of many recent or soon-to-be-released upgrades to the Neo4j Graph Platform.**

We encourage you to download Neo4j Database 3.4 and try it out for yourself – whether as part of Neo4j Desktop or as part of your Enterprise Edition license.

While we know some of the most clear and obvious ways that this release will help you harness your data connections, we're even more excited to hear how our millions of users worldwide will use these new features to build applications beyond the limits of our wildest imagination.

For all of the Neo4j team,

–Philip Rathle

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cache warming

Cartesian coordinates

cypher

database security

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graph database

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Neo4j 3.4



Author

**Philip Rathle, VP of Products**

Philip Rathle has a passion for building great products that help users solve tomorrow’s challenges. He spent the first decade of his career building information solutions for some of the world’s largest companies: first with Accenture, then with Tanning Technology, one of the world’s top database consultancies of the time, ...

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**EXHIBIT 3**



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To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
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```

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**EXHIBIT 4**





(Neo4j Blog)←[:BACK]

# Simplicity Wins: We're Shifting to an Open Core Licensing Model for Neo4j Enterprise Edition



Philip Rathle, VP of Products

Nov 15, 2018 · 2 mins read

**TL;DR:** Starting with Neo4j 3.5, Enterprise Edition source code will no longer be published to the open source commons, including future versions.

- This does not impact Neo4j Community Edition. We will continue to deliver the world's best and most comprehensive graph database as open source.
- This does not affect customers, partners, OEMs or Neo4j Desktop users.
- Code contributions from outside Neo4j remain available as open source in earlier versions.



## Neo4j Is Going Open Core

Today we are announcing an important change to the licensing of Neo4j Enterprise Edition: **Beginning with Neo4j 3.5 release candidates, Enterprise Edition is available solely under a commercial license.** ([Read](#)

We are doing this to clarify our licensing model and so that we can continue to offer you the most powerful [graph database technology](#) that we can offer: both commercially and across the wide range of open source projects to which we remain strongly committed. In essence, Neo4j is moving to a more industry-standard “open core” licensing model.

Neo4j Community Edition – the core of the [Neo4j Graph Platform](#) – will continue to be provided under an open source GPLv3 license, as it has been for years. In order minimize business confusion around what portion of our IP we sell and what portion we offer as free open source, we will no longer make Neo4j Enterprise Edition source code publicly available.

This move brings Neo4j in line with industry norms – most of the popular open source databases use an open core model – and it clearly delineates the licensing choices between Neo4j Enterprise and Community Editions.

What this **does not** affect:

- **Neo4j Community Edition.** This does not impact Community Edition in any way. The vast majority of [new features](#) have always landed into both editions, and we intend to continue investing in it.
- **Any software that you have received (or will receive) from us.** The Neo4j Enterprise distribution that you download from Neo4j.com, Docker Hub, etc. is not undergoing any change. Those binaries are already licensed under a commercial license. This move doesn't affect that.
- **Startup, Educational, Developer, Data Journalism and other free Enterprise Edition licenses.** Neo4j Enterprise Edition is available under a commercial license and is, in many cases, free.
- **Contributors.** More than 99% of Enterprise Edition code was authored by Neo4j employees and contractors. We have reached out to the few who make up the fractional <1% to affirm their contributions are given proper due, as well as to confirm their contributions are still freely available in past versions.
- **Older versions of Neo4j Enterprise.** Any version of Neo4j that's already been published is going to remain on GitHub.

What this **does** affect:

- **The source code we publish.** In the past, we've published our Enterprise Edition code to GitHub alongside the Neo4j Community Edition source that we publish. Starting today, we will only publish source for Neo4j Community Edition.
- **Neo4j-dependent open source projects.** We've reached out to the few open source projects we know are based on Neo4j Enterprise Edition, and we are working with them to make sure they have a way forward. These are few and far between (we know of five globally) as the AGPLv3 is a rather restrictive license, and because many projects qualify for free use under the Startup license. [Please get in touch with us](#) if you feel you fall under this category.

## Reasons Behind Our Move to Open Core

Neo4j Enterprise Edition has always [unambiguously](#) been Neo4j's commercial edition, just like Neo4j Community Edition has always clearly been intended for broad free use by the community under the GPLv3.

Our choice to license our commercially-destined, commercially-produced IP as AGPLv3 was made for a number of reasons that were right for the time. However, times have changed.

The right decision for us today is to make the commercial portion of our product closed source – but not the rigorously open and extensively capable Neo4j Community Edition database core.

This change clarifies what has always been our intent. The move to a clearer and more commonplace model comes from numerous cases over the years where we saw confusion, misunderstanding and misinterpretation.

Any customer, user or partner who feels this change will directly affect them should reach out to us by [contacting Neo4j Support](#).

## Final Thoughts: We Love Open Source

We are narrowing the scope of our open source contributions in one specific area, but if you take a step back and look at all of the work that we're doing today, we're making *more FOSS contributions than ever, across a wider range of projects than ever, with more permissive licenses than ever.*

We are committed to continuing to invest in and to offer the largest, most comprehensive graph technology stack available, as open source.

Today this includes the following projects and products:

- **Neo4j Community Edition** (GPLv3) – the best open source graph database in the world which is the core of the Neo4j ecosystem and platform;
- **openCypher** (Apache 2.0) – the graph query language and future of Neo4j Cypher via the openCypher project and the [GQL standardization initiative](#);
- **Native language drivers** (Apache 2.0) for [Java](#), [JavaScript](#), [Python](#), [.NET](#) and [Go](#); as well as Neo4j's [JDBC driver](#) and a variety of connectors (for [Elasticsearch](#), [GraphQL](#), et al);
- **Graph Algorithms** (GPLv3) – more than 20 iterative graph algorithms for finding communities and clusters, centrality, similarities and paths;
- **Neo4j APOC Library** (Apache 2.0) – a collection of [hundreds of procedures](#) (“Awesome Procedures on Cypher”) that work with both editions of Neo4j;
- **Cypher for Apache Spark** (Apache 2.0) and **Cypher for Gremlin** (Apache 2.0) – extending the Cypher language to other graph engines besides Neo4j.

If you'd like to know more of the details about our move to an open core licensing model, please read more on our [published FAQ page](#). Thank you so much for your understanding, and let's stay connected!

–Philip

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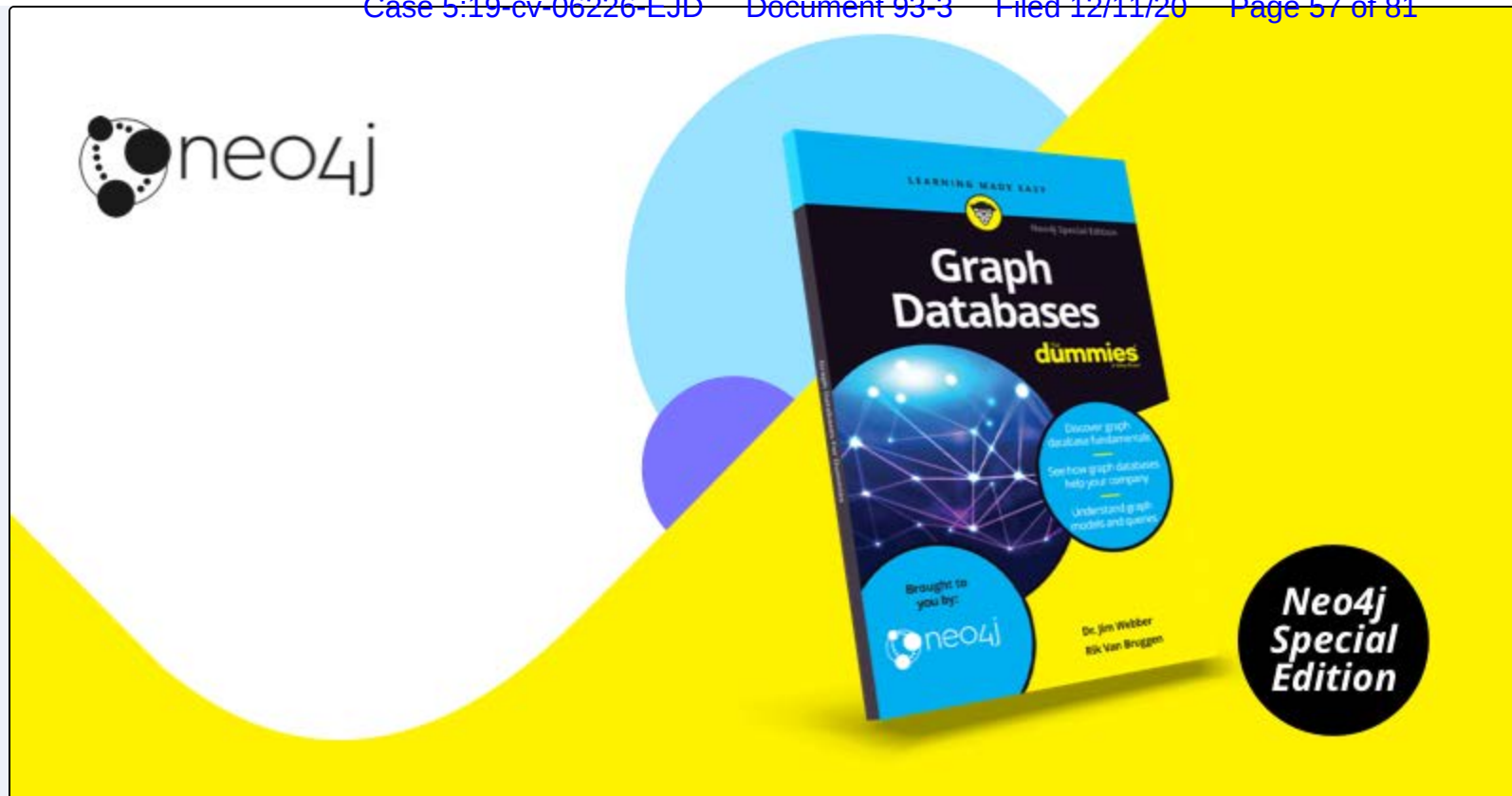
Author

**Philip Rathle, VP of Products**

Philip Rathle has a passion for building great products that help users solve tomorrow’s challenges. He spent the first decade of his career building information solutions for some of the world’s largest companies: first with Accenture, then with Tanning Technology, one of the world’s top database consultancies of the time, ...

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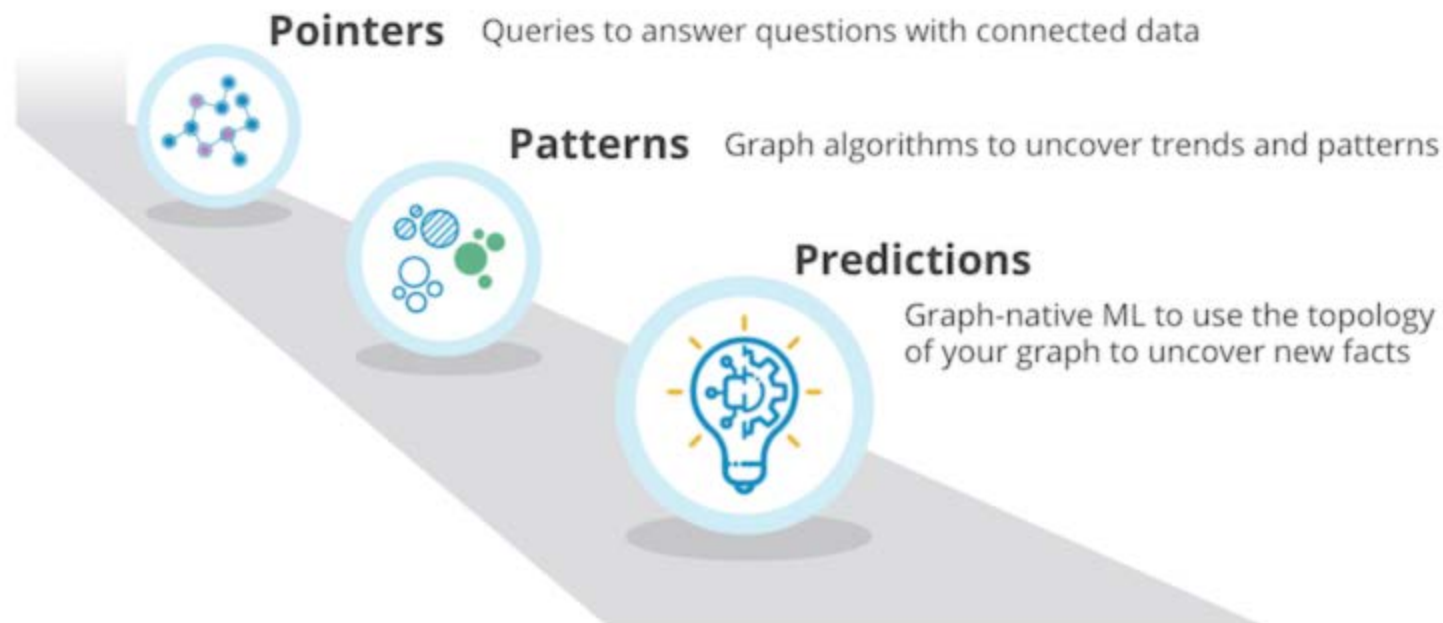
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## **EXHIBIT 5**



# Trademark Policy

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- Neo4j
- Cypher
- Neo Technology

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Neo Technology’s Trademark Policy attempts to balance two competing interests: Neo Technology’s need to ensure that its Trademarks remain reliable indicators of quality, and Neo Technology’s desire to permit community members to contribute to the development and success of the Neo Technology software.

Striking a proper balance can be difficult, and we hope this Trademark Policy will help us to do that.

Underlying Neo Technology’s Trademark Policy is the general law of trademarks. Trademarks exist to help consumers identify the source or origin of products. When a company makes a good product or a bad one, consumers begin to associate those qualities with the name and trademarks of that company. The reputation of a company can be a key factor in a user deciding to use one product or another. Allowing others to place a company’s trademarks on other people’s products can affect this reputation. Trademark law exists, at least in part, to help users avoid being confused about the source and quality of the goods they are using.



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Neo Technology software available here.” It must not say “Neo Technology services sold here,” or “custom Neo Technology software available here.”

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- **Use of word mark.** We encourage you to use the word form of the Trademark (as opposed to the logo), because using the word form is easier to do without violating this policy. You may use the word form of the Trademarks – Neo4j and Cypher. No other capitalization should be used. Use of the word form of the trademark should be in the same font and style as the surrounding text.
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[webinfo@neotechnology.com](mailto:webinfo@neotechnology.com)

### Policy Updates

Neo Technology reserves the right to modify this Trademark Policy at any time. You should review this Trademark Policy from time to time so that you will be aware of any updates. Any updates will apply as soon as they are posted on this page.

Questions

Neo Technology has tried to make this Trademark Policy as comprehensive and understandable as possible. If you are considering a use of a Trademark that is not covered by the policy, and you are unsure whether that use would run afoul of this Trademark Policy, please feel free to [contact us](#). Also, we welcome your suggestions as to how to make this Trademark Policy better and more workable for our community. We like hearing from you!

Updated October 13, 2015

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## **EXHIBIT 6**



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# Trademark Guidelines

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10/16/2020 D Myers

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## Our Commitment to Open Source Principles

We want to encourage and facilitate the use of our open source software by the community, but do so in a way that still ensures that the Neo4j trademarks are meaningful as a source and quality indicator for our software and the associated goods and services and continue to embody the high reputation of the software and the community associated with it. This Policy therefore tries to strike the proper balance between: 1) our need to ensure that our trademarks remain reliable indicators of the qualities that they are meant to preserve and 2) our community members' desire to be full participants in Neo4j® projects.

## Trademarks Subject to the Guidelines

### Our Trademarks

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Cypher®

Neo4j® Bloom™

Neo4j® Desktop™

Neo Technology®



2. Our logos (the "Logos")



3. The unique visual styling of our website and elements used in or otherwise related to the products and services we offer (the "Trade Dress"). See our [Style Guide](#) for further information.

This Policy encompasses all trademarks and service marks, whether Word Marks, Logos or Trade Dress, which are collectively referred to as the "Marks." Some Marks may not be registered, but registration is not necessarily required for ownership of trademarks. This Policy covers our Marks whether they are registered or not.

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The following guidelines show proper (and improper) use of Marks. Any use of the Marks must be licensed and comply with these guidelines. Whenever you use one of the Marks, you must always do so in a way that does not mislead anyone, either directly or by omission, about exactly what they are getting and from whom. For example, you cannot say you are distributing the Neo4j® software when you're distributing a modified version

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Always use the Marks in their Exact Form and Distinguishable from Other Text. Always use the Word Marks in a manner distinguished from surrounding text, with initial capital letters, and in the exact form with the correct spelling (neither abbreviated, hyphenated, or combined with any other word or words).

### CORRECT

Neo4j®

### INCORRECT

NEO4J  
Neo-4j  
neo4j  
n4j  
Neo

Use Marks as Proper Adjectives Followed by a Generic Term. Trademarks should be used as adjectives followed by a generic modifier, and not as nouns or verbs. Trademarks are products or services, never actions. Do not use "a" or "the" to refer to an instance of the Marks. For example:

### CORRECT

### INCORRECT

**CORRECT**

The Neo4j® graph platform is widely used in many industries.

I was able to quickly realize graph epiphanies with Neo4j® Bloom™ visualization software.

I downloaded the Neo4j® database from [neo4j.com](https://neo4j.com).

Cypher® query language

**INCORRECT**

Neo4j® is widely used.

We use the Neo4j.

I use Cypher.

I load data into and out of Neo4j.

Do Not Use Marks in the Possessive Form. Because trademarks are not nouns, they should not be used in the possessive form. For example:

**CORRECT**

The Neo4j® graph database software presents and stores data natively as a graph.

**INCORRECT**

Neo4j's storage presents and stores data natively as a graph.

Do Not Use Marks in the Plural Form. Because trademarks are not nouns, they should not be used in the plural form. For example:

**CORRECT**

The Neo4j® platform allows multiple instances of the Neo4j database software to form a single highly-available cluster.

**INCORRECT**

High-availability clustering allows a cluster of instances to be formed using multiple Neo4js.

Do Not Use Marks to Suggest Endorsement by Neo4j.

**CORRECT**

graph database software

**INCORRECT**

"Open Neo4j"

XYZ ENTERPRISE 3.4.9 (FREE AND OPEN UNRESTRICTED NEO4J ENTERPRISE FORK)

## Use of Logos

You may not change any Logo except to scale it proportionally. This means you may not add decorative elements, change the colors, change the proportions, distort it, add elements, or combine it with other logos. The logo may only be used displaying the exact colors shown in our [Style Guide](#).

## Mark Attribution and Notices

The first or most prominent mention of a Mark on a webpage, document, packaging, or documentation should be accompanied by a symbol indicating whether the mark is a registered trademark ("®") or an unregistered trademark ("™"). Also, if you are using our Marks for uses for which we are granting a separate license, please put following notice at the foot of the page where you have used the Mark (or, if in a book, on the credits page), on any packaging or labeling, and on advertising or marketing materials: "Neo4j is a trademark or registered trademark of Neo4j, Inc. or its subsidiaries in the United States and/or other countries."

## Possible Infringement

If you are aware of any confusing use or misuse of the Marks in any way, we would appreciate you bringing this to our attention. Please contact us at [webinfo@neo4j.com](mailto:webinfo@neo4j.com) so that we can investigate it further.

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*Updated April 3, 2019*

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**EXHIBIT 7**



## Legal Notices

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[Statement](#)

This document outlines the policy for allowable uses of trademarks owned by Neo4j, Inc. and its subsidiaries ("Neo4j") by other parties.

Neo4j owns all Neo4j-related trademarks, service marks, and logos on behalf of our communities and the names of all Neo4j® projects are trademarks of Neo4j.

The role of trademarks is to provide assurance about the quality of the products or services with which the trademark is associated. Neo4j has established this Policy to encourage others to make accurate, non-confusing use of the Neo4j trademarks, while also ensuring that those trademarks maintain their distinctiveness and strength as reliable indicators of the source and quality of Neo4j products and services. Although some Neo4j projects may be available under free and open licenses, those licenses cover copyright only and do not include any express or implied right to use our trademarks. Neo4j does not allow third parties to use its trademarks without a written agreement or express permission. Thus, Neo4j projects that are available under open source licenses may be copied, modified, or sold by third parties, but they cannot be branded or marketed with Neo4j trademarks in the absence of a trademark license.

While open-source licenses allow modification of copyrighted software and distribution in original or modified form, such distribution could be misleading if distributed under the same name. This could cause confusion among consumers of the software as to source. They may mistakenly believe they are receiving software that is produced or supported by Neo4j. This Policy describes the circumstances under which you may use our trademarks, regardless of the type of license you may have from Neo4j. In this Policy we are not trying to limit the lawful use of our trademarks, but rather describe for you what we consider the parameters of lawful use to be. Trademark law can



be ambiguous, so we hope to provide enough clarity for you to understand whether we will consider your use licensed or non-infringing.

Neo4j® software, which is created and/or distributed by Neo4j, is the software in the exact form that it is distributed by Neo4j without modification of any kind. To the extent any authorized modifications are made to the software, such modified software should no longer bear the Neo4j trademarks. The public has a right to know when it is receiving a genuine Neo4j® product that is quality assured by Neo4j.

The sections that follow describe what trademarks are covered by this Policy, as well as uses of the trademarks that are allowed without additional permission from us. Any use that does not comply with this Policy or for which we have not separately provided written permission is not a use that we have approved, so you must decide for yourself whether the use is nevertheless lawful.

## Our Commitment to Open Source Principles

We want to encourage and facilitate the use of our open source software by the community, but do so in a way that still ensures that the Neo4j trademarks are meaningful as a source and quality indicator for our software and the associated goods and services and continue to embody the high reputation of the software and the community associated with it. This Policy therefore tries to strike the proper balance between: 1) our need to ensure that our trademarks remain reliable indicators of the qualities that they are meant to preserve and 2) our community members' desire to be full participants in Neo4j® projects.

## Trademarks Subject to the Guidelines

### Our Trademarks

This Policy covers the following non-exhaustive list of our trademarks:

1. Our word trademarks and service marks (the "Word Marks"):

Neo4j®

Cypher®

Neo4j® Bloom™

Neo4j® Desktop™

Neo Technology®

## 2. Our logos (the "Logos")



## 3. The unique visual styling of our website and elements used in or otherwise related to the products and services we offer (the "Trade Dress"). See our [Style Guide](#) for further information.

This Policy encompasses all trademarks and service marks, whether Word Marks, Logos or Trade Dress, which are collectively referred to as the "Marks." Some Marks may not be registered, but registration is not necessarily required for ownership of trademarks. This Policy covers our Marks whether they are registered or not.

## Universal Considerations for All Uses

The following guidelines show proper (and improper) use of Marks. Any use of the Marks must be licensed and comply with these guidelines. Whenever you use one of the Marks, you must always do so in a way that does not mislead anyone, either directly or by omission, about exactly what they are getting and from whom. For example, you cannot say you are distributing the Neo4j® software when you're distributing a modified version of it, because people would be confused when they are not getting the same features and functionality they would get if they downloaded the software directly from us. You also cannot distribute Neo4j® software using the Marks if you do not have a license from us, because that would imply that your distribution comes from or is supported by Neo4j. You cannot use our Marks on your website in a way that suggests that your website is an official website or that we endorse your website, unless permitted in a written agreement with us. You can, though, say you like the Neo4j® software, say that you participate in the Neo4j®

community, or refer to Neo4j® products and services.

This fundamental requirement, that it is always clear to people what they are getting and from whom, is reflected throughout this Policy. It should also serve as your guide if you are not sure about how you are using the Marks.

In addition:

You may not use the Marks in association with the use or distribution of software if you are also not in compliance with the copyright license for the software.

You may not use or register, in whole or in part, the Marks as part of your own trademark, service mark, domain name, company name, trade name, product name or service name.

Provided that you have obtained a license from Neo4j, you can use the Word Marks in book and article titles, and the Logo in illustrations within the document, as long as the use does not suggest that we have published, endorse, or agree with your work.

Trademark law does not allow your use of names or trademarks that are too similar to ours. You therefore may not use an obvious variation of any of our Marks or any phonetic equivalent, foreign language equivalent, takeoff, or abbreviation for a similar or compatible product or service. This includes combinations or integrations of all or portions of the Marks in a way that the public may think of the use as a new mark (e.g. SuperNeo4j, or Neo5k).

You agree that you will not acquire any rights in the Marks and that any goodwill generated by your use of the Marks inures solely to our benefit.

## Proper Use of the Marks

These rules hold true for all trademarks, not just ours, so you should follow them for our Marks as well as anyone else's.

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CORRECT	INCORRECT
Neo4j®	NEO4J Neo-4j neo4j n4j Neo

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CORRECT	INCORRECT
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I was able to quickly realize graph epiphanies with Neo4j® Bloom™ visualization software.	Neo4j® is widely used.  We use the Neo4j.  I use Cypher.
I downloaded the Neo4j® database from <a href="https://neo4j.com">neo4j.com</a> .	I load data into and out of Neo4j.
Cypher® query language	

Do Not Use Marks in the Possessive Form. Because trademarks are not nouns, they should not be used in the possessive form. For example:

CORRECT	INCORRECT
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--	---

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CORRECT	INCORRECT
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CORRECT	INCORRECT
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